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Reference: 448vsecl1cl2savev7

Last update : 15/06/07

INSTALLATION & RECOMMENDATION GUIDE AIR – CONDITIONING UNIT VinoSafe TYPE VSE-CL1 – VSE-CL2

PLEASE READ THESE INSTRUCTIONS BEFORE ASSEMBLING AND COMMISSIONING YOUR AIR-CONDITIONING UNIT. THEY INCLUDE NECESSARY INFORMATION FOR YOUR SAFETY, THE APPROPRIATE USE AND MAINTENANCE OF YOUR AIR-CONDITIONING UNIT.

WAIT FOR 48 HOURS BEFORE TURNING THE AIR-CONDITIONING UNIT ON

A. THANKS…

The VinoSafe team thanks you for choosing a VSE air-conditioning unit. We design and manufacture them in the French region of Alsace in the same spirit as a wine grower who constantly tries to improve her/his wines quality. We hope you will be fully satisfied. It is therefore mandatory for you to take some time to read this guide simultaneously with the discovery of your air-conditioning unit look and features. Your wines deserve this as you invest time and money into them.

We thank you in advance to share with us all relevant remarks that will help us to improve our products and services.

B. ROLE OF YOUR VINOSAFE RESELLER

You will find hereunder the name and address of the company with whom you concluded this purchase. Your local contact is the one who knows you best and who will be able to answer your first questions.

With 15 years experience in the wine cellar business, we have found out that 2 problems out of 3 can be solved without any intervention of VinoSafe to replace some parts. This is why you will find in this guide a lot of explanations and a list of questions and recommendations if you encounter a problem. If you do not solve the issue, please call your reseller and call VinoSafe in case you are not getting the appropriate replies.

Don't forget that a satisfied customer will always be a potential for positive recommendations to neighbours and friends. It is VinoSafe's interest to make sure you are not left without the appropriate support!

Your local reseller

C. DELIVERY, UNPACKING, STORAGE, REMOVAL CONDITIONS

You have acquired a refrigeration system that contains a gas in a closed circuit, and oil in the compressor. Your product cannot be transported and stored in any position.

The air-conditioning system must never be put to bed. It has to be delivered inclined, then after out packing, it always must remain standing (respect the same records at the time of a move)

Please check that the packaging is not damaged before you unpack. Damages to the outside packaging could be significant of transport damages that could end up creating dysfunctions or outside defaults. Do not hesitate to make comments on the delivery documents that you receive from the freight forwarder.

If you do not start using your VSE-CL immediately, leave it in its original packaging to protect it.

D. CABINET IDENTIFICATION

The identification nameplate is located at the top/left of the rear of the air-conditioning unit.

VINOSAFE 2, rue des Artisans F-68280 SUNDHOFFEN www.vinosafe.com	CE			
Type :		N° de serie :		
VSP :		Volts :		Hz :
VSM :		Watts :		
VSE PC :		R134a :		gr
VSE CL :		Année :		
VSI :				

WARNING: WHEN YOU NEED INFORMATION OR TECHNICAL ASSISTANCE, PLEASE ALWAYS SUPPLY THE MODEL, TYPE AND SERIAL NUMBER LOCATED ON THIS VINOSAFE NAMEPLATE.

E. PRODUCT PRESENTATION

You will find on our website www.vinosafe.com the most recent information on your air-conditioning unit, including the latest version of this user manual that you will be able to download.
On our site you can also buy spare parts and accessories to complement the inner equipment of your wine cellar.

F. STORING WINE

Your **VinoSafe** air-conditioning unit has been designed to provide ideal conservation conditions for your wines.

Wine is a complex product, which develops very slowly over a long time, requiring specific conditions in which to mature.

All wines are stored at the same temperature but the temperatures for serving and tasting vary depending on the wine.

As in wine producers' natural wine cellars, it is not the storage temperature itself, which is important, but rather the need for the temperature to remain constant. In other words, if your store is set to any temperature between 10°C and 14°C, your wine will enjoy ideal conservation conditions provided that this temperature is not subject to fast and important variations.

IN ANY CASE, IF YOU NOTE ANY ANOMALY IN THE TEMPERATURE OR HUMIDITY INSIDE YOUR STORE, REMEMBER THAT YOUR WINES WILL ONLY BE AFFECTED IF THEY ARE EXPOSED TO THESE ABNORMAL CONDITIONS FOR A LONG TIME.

G. SAFETY RECOMMENDATIONS

- Use this appliance only for the purpose for which it is intended:
  - Storing your wine at a temperature between 8° and 15°C.

  Any other purpose may be dangerous and is forbidden. The manufacturer may not responsible if the appliance is not used properly.

- An appliance that has been damaged (impact, flooding, fire, surges caused by lightning, etc…) may be dangerous for your safety. If the appliance has suffered damage, unplug the appliance immediately or disconnect the power supply and contact the manufacturer (see rating plate on the appliance).

- This appliance complies with current safety regulations. Maintenance work (such as electric connections) must only be carried out by qualified engineers. Faulty connections or repairs that have not been carried out correctly present a considerable danger for the user.

- Make sure that the voltage on your mains supply corresponds to the rating shown on the rating plate.

- This appliance may not be electrically safe if it is not connected to an effective earth lead. It is essential that this basic safety measure is taken and, if there is any doubt, the domestic wiring installation should be checked by a qualified electrician. The manufacturer shall not be held responsible for the consequences if the appliance is not earthed or if the earth is faulty or incorrectly connected.

- For safety reasons do not use an extension lead.

- Disconnect the appliance from the power supply while undertaking maintenance work or cleaning (unplug the appliance or open the circuit breaker).

- Do not allow young children to play with this appliance or to use it.

- Do not lean on the air-conditioning unit.

- If liquid accidentally runs into the air conditioning unit, (broken wine bottles, etc…), unplug the appliance immediately or disconnect the mains supply and contact the manufacturer (see rating plate on the appliance).

- Make sure that appliances are rendered unusable when they are no longer in use. Unplug the appliance and cut the cable. Then take the appliance to an approved refuse tip.

- Keep the manuals with your appliance for future reference.

H. INSTALLATION OF YOUR AIR CONDITIONING UNIT

H1. PREPARATION OF THE "WINE CELLAR"

H1.1 Insulating work in the wine cellar

Your room must satisfy specific insulating criteria so that your VINOSAFE air – conditioner can effectively and durably regulate the ambient air while minimising your consumption of electricity.

IMPORTANT
The insulating work must be carried out on all the surfaces of the wine cellar (walls, grounds, ceiling) and on the door of the "Wine Cellar" by respecting the following procedures (paragraphs 1.2 and 1.3).
In addition to its insulation, a tight seal must be fixed all around the door.

H1.2 Installation of a vapour barrier :

The water vapour tends to migrate through the surfaces from outside the cellar (warmer) to inside the cellar (cooler). This excessive addition of humidity causes the seeping of water, producing several harmful results :

❶ Poor storage of labels and corks with risk of mildew.

❷ Uninterrupted operation of the air – conditioner reducing the length of its life. In fact, all the air – conditioner' s energy is used to dry the cellar and not to cool the air.

❸ Damaging of the thermal insulation.

To avoid this, it is **essential** to equip all the interior surfaces of the cellar **with a vapour barrier** (walls, ceiling, ground or door). **This vapour barrier must be waterproof and continuous.**

This can be archived :

❶ By covering the wall with a polythene type plastic film.

❷ By covering the surfaces with an aluminium / bitumen compound.

❸ By covering the surfaces with an aluminium / polythene compound.

❹ By applying bitumen to the surfaces.

H1.3 Installation of a thermal insulation :

The thermal insulation limits the heating of the cellar providing a better operating rate of the air-conditioning unit.

We remind you that **it is important to insulate all the surfaces of your cellar** (walls, ground and ceiling) **over the vapour barrier.**

For the ground, it is preferable to use an extruded polystyrene type of compact insulator (Roof mat) or polyurethane foam that can be covered for a more attractive finish with, for example, washed fine gravel over a cement covering.

You can protect the ceiling and wall insulation using paint or a rough cast coating.

The characteristics of the insulation depend on the volume of your cellar and the type of material chosen and are in relation to the following calculations:

- **<u>Calculation of the total area of the surface S</u> :**

L = length of the room (in metres) W = width of the room (in metres) H = Height of the room (in metres)	S (in m²) = (L + W) x H x 2 + L x W x 2

- **<u>Calculation of the thickness of the insulation</u> :**

Assumption: External temperature = 30° C
Internal temperature of the cellar = 10° C

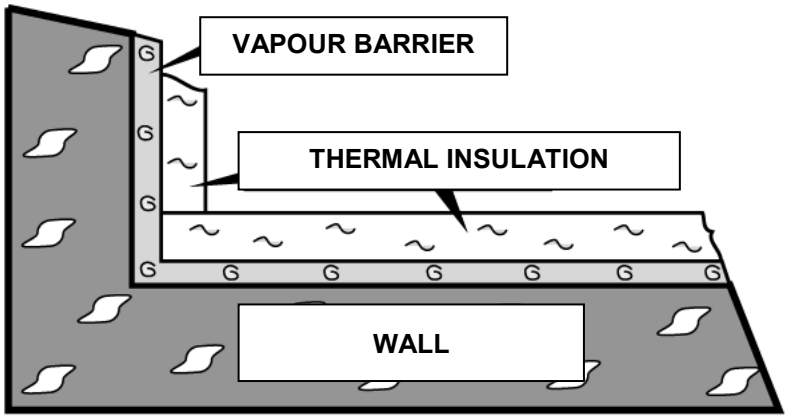
Percentage duty cycle: 75 %
including 15 % in cooling mode
including 60 % in maintenance mode

<u>Choose your insulating material and retain the corresponding insulating coefficient λ :</u>

Insulating material	**λ (En kcal/m/° C)**
Expanded polystyrene	0.038
Extruded Polystyrene (Roof mat)	0.026
Polyurethane	0.022

<u>Now determine the insulating thickness "T":</u>

- For an air conditioning unit type VSE-CL1: T (mm) = λ x S x 70
- For an air conditioning unit type VSE-CL2: T (mm) = λ x S x 33



OUTSIDE OF THE WINE CELLAR

<u>GENERAL PRECAUTIONS :</u>
The insulation of the cellar (vapour barrier a thermal insulation) must be continuous in order to avoid any passage of harmful heat or humidity through the surfaces.

Avoid thermal bridges by also insulating metallic beams, water columns, etc.., passing through your wine cellar**.**

<u>PREPARING THE ELECTRIC CONNECTION</u>
The support frame is supplied with a cable (5m long) equipped with a male plug 2P + earth.

Install your electric power cable next to the support frame: single-phased electric supply cable + earth (section 3 x 1,5 mm^2)

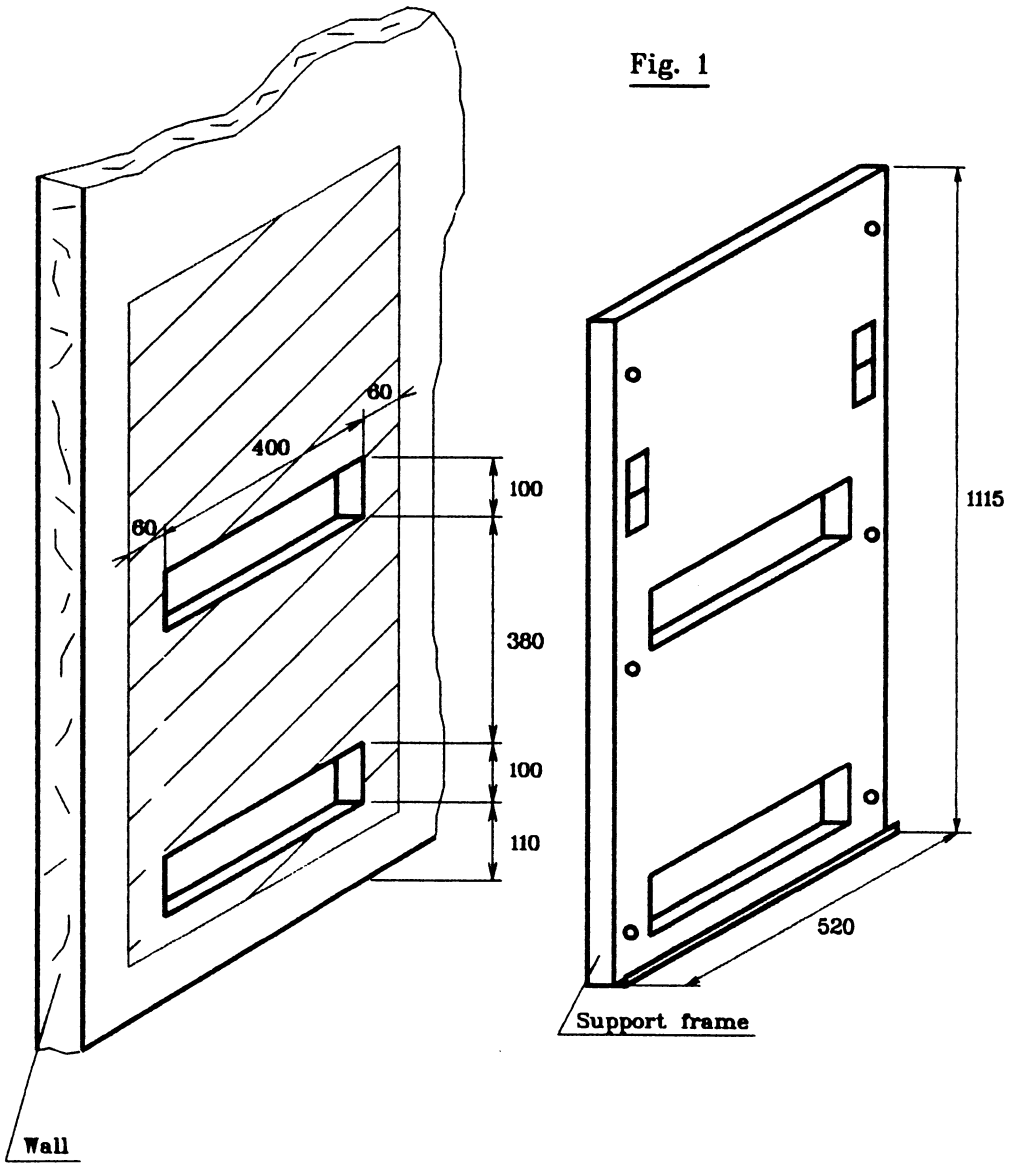
Avoid any accident by momentarily cutting the power supply at the meter.

H2. ASSEMBLY AND INSTALLATION OF THE AIR CONDITIONER VSE-CL1 AND VSE-CL2

H2.1 Air passages to plan before mounting on the wall :

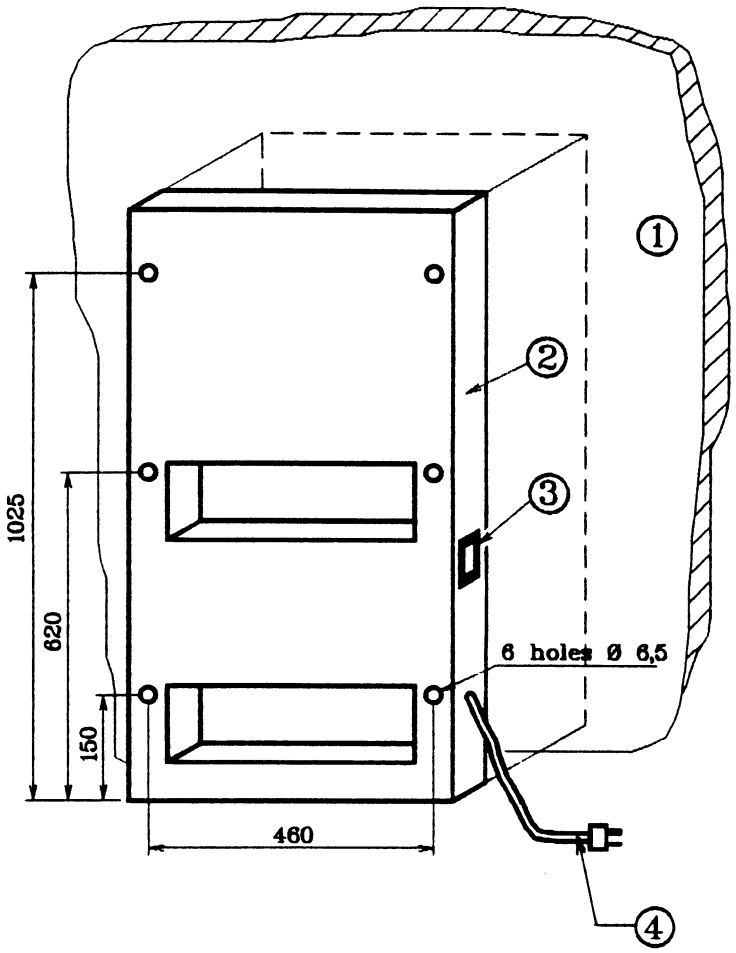
Provide for two openings on the wall. Minimal air passage section : 400 cm^2 per opening. Dimensions 400 x 100 mm (see fig. 1 below).

Figure 1



H2.2 Mounting the support frame on the wall :

Figure 2



❶ Wall

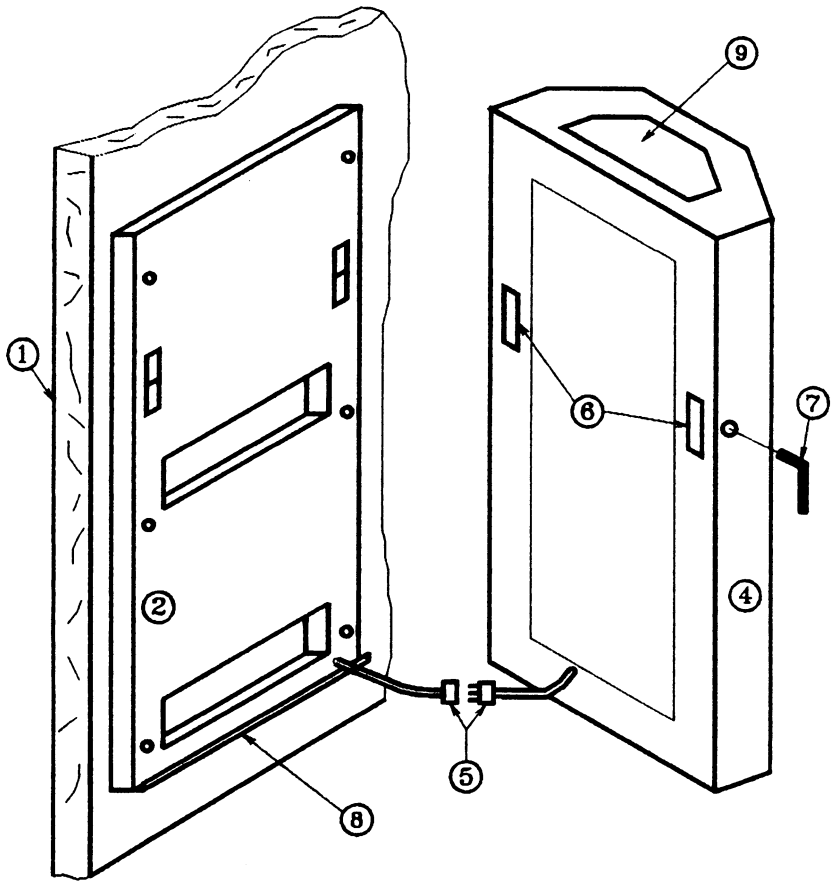
❷ Air – conditioner support frame

❸ Air – conditioner power

❹ Air – conditioner supply cable 3 x 1 mm^2 (Live, Neutral + Earth)

- Use the support frame as drilling templates taking care that it is correctly positioned in relation to the ventilation openings made.
- Mounting the support frame ❷ with 6 screws ∅6 with cement plugs.

H2.3. Assembly of the air – conditioner on the support frame



❶ Wall

❷ Support frame

❸ Air - conditioner

❹ Support frame to air – conditioner connector

❺ Tightening hook mounted on a cam

❻ Bent hexagonal key

❼ Lower rim

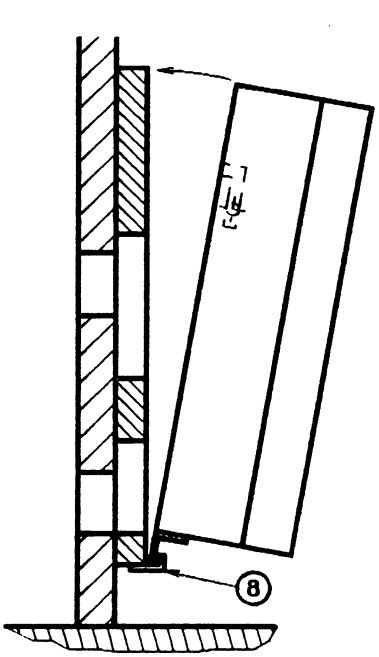
❽ Upper grid

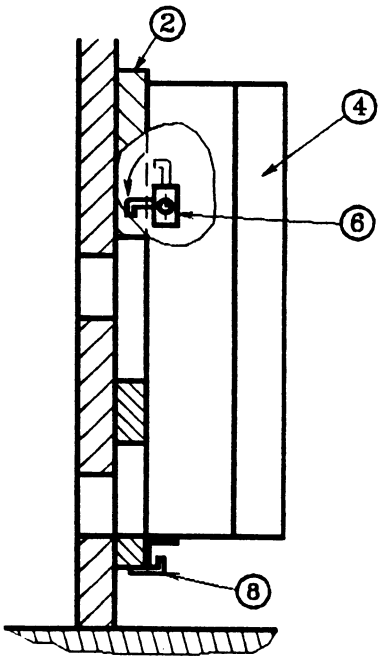
- Install the air – conditioning unit ❹ in front of the support frame ❷ and assemble the connector ❺.
  Warning!
  Do not lift the air – conditioner by its upper grid.

- Position the air – conditioning unit on the lower rim of the support frame.

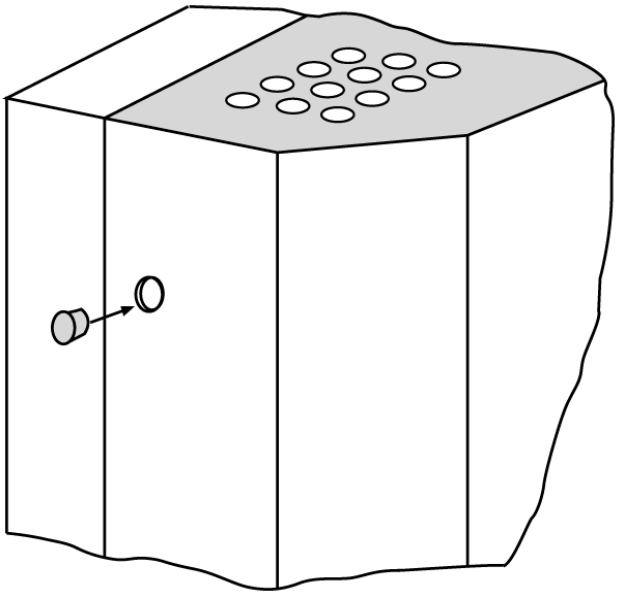
- Latch the hooks ❻ into place one at a time using the hexagonal key ❼ in the Slits of the support frame **but do not tighten them**.

- When the 2 hooks are correctly positioned in the support frame, tighten them definitively.





Insert the two black plugs, which block the handle holes of the hooks.

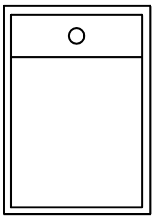


Your VINOSAFE AIR – CONDITIONING UNIT IS INSTALLED

I. USER MANUAL

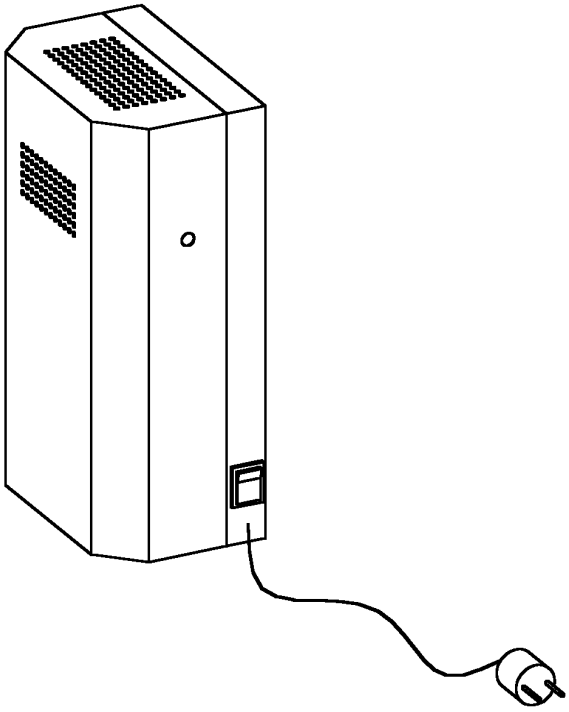
I-1 COMMISSIONING

- Set the switch to 0.



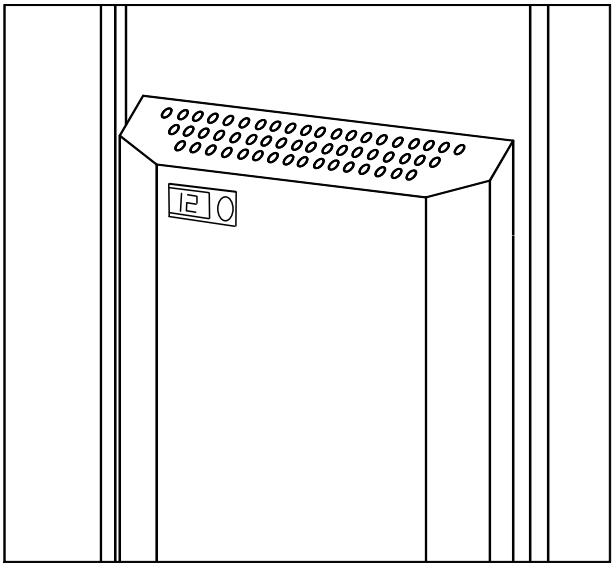
- The switch on the right side of the support frame controls the air conditioning unit.
- Connect the power supply cable (single phase 220 V+ earth) to a plug.

I-2 LIGHTING



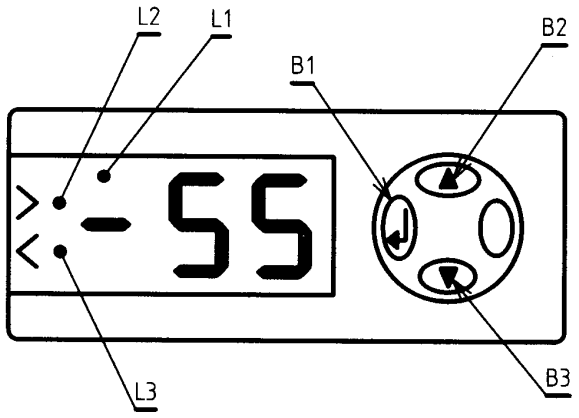
I-3 AIR CONDITIONNING UNIT

- Turn on the air conditioning unit (switch at end of strip).
- The green light should come on.
- The internal fan operates continuously.
- The external fan operates only when the unit is cooling.
- The unit thermostat is preset to maintain a constant temperature of about 12 to 13 °C inside the wine cellar.
- This temperature can be adjusted between 8°C and 15° C by setting the thermostat on the front face of the air conditioning unit.
- If the temperature outside the cellar drops too low, (in winter, for example) there is a risk that the temperature inside the cellar will fall, a heater within the air conditioning unit will automatically take over from the refrigeration system in order to maintain the ideal temperature.



I-4 SETTING AND ADJUSTING THE TEMPERATURES

The set values in the thermostats are not temperatures in grades, but indexes. A 1 unit index value is close to 1° Celsius. It is necessary to wait 48 hours to check the impact of a temperature adjustment on the thermostat.

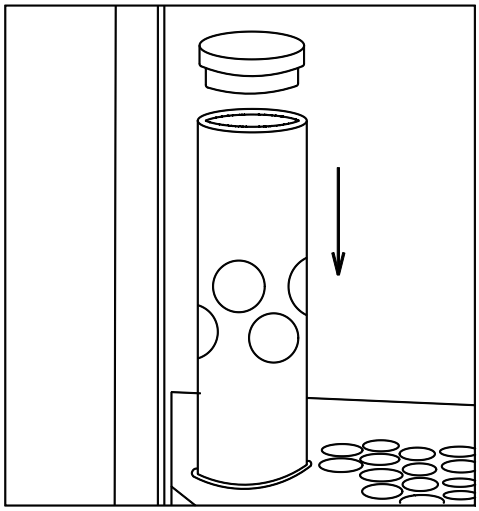
Electronic regulator (Picture D1) :	Pict.D1
B1 : Displays the requested value Validates the set value B2 : Increases the requested value B3 : Decreases the requested value L1 : Flashes during a programming phase L2 : The heating resistance is active L3 : The compressor is active	

Display and programming of the desired index value:

- Press **B1** until you read the message **Set**.
- Press **B1** a second time to display the wished index value.
- Change this value using **B2** & **B3**.
- Save this value by Pressing once more on **B1**.
- To confirm the value is saved, the message **Set** will be displayed.

After some time the display gets back to normal mode (display of the actual internal temperature).

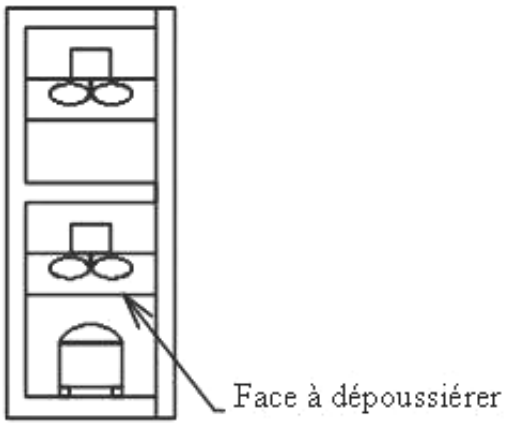
I-5 FILTRING NEW AIR FROM OUTSIDE

A small amount of new air from outside is continuously drawn into the cellar to oxygenate the inside. This air passes over an active carbon filter. This filter must be changed regularly if the cellar is located in a place with unpleasant odours.	

I-6 GENERAL PRECAUTIONS

- RESETTING THE TEMPERATURE
  - Adjust the temperature gradually in very small increments so that the air conditioning unit does not operate for an excessively long time (to avoid icing up).

- TO ENSURE THAT THE AIR CONDITIONING UNIT OPERATES EFFICIENTLY
  - Never obstruct the ventilation grills in the wall or over the unit.
  - The cellar should be placed in well-ventilated area where the temperature does not exceed 35°C, to ensure that the refrigeration unit will be effective.
  - Dust sucked in by the air conditioning unit may reduce the efficiency of operation. The air conditioning unit should be checked regularly to ensure that the condenser is clean. The air conditioning unit should be lifted off the wall (page 9) and the condenser should be cleaned using a vacuum cleaner. This maintenance is not covered by the guarantee.



Side to be cleaned

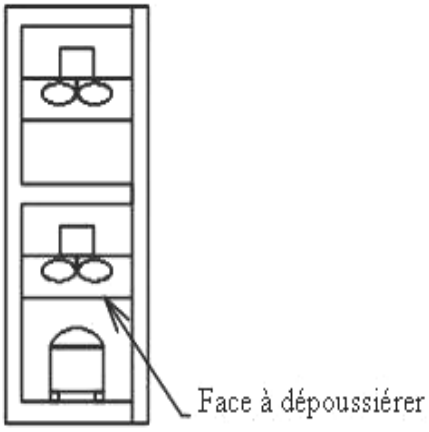
J. MAINTENANCE

- **TEMPERATURE TOO LOW**

  - **The thermometer is not showing the correct reading**: Check by using another thermometer.
  - **Thermostat set too low**: Raise the temperature gradually to avoid subjecting your wine to sudden changes in temperature.

- **TEMPERATURE TOO HIGH**

- **The thermometer is not showing the correct reading**: Check by using another thermometer.
- **Thermostat set too high**: Lower the temperature gradually to avoid subjecting your wine to sudden changes in temperature.
- **Door not properly closed**: Check that the door closes and locks correctly.
- **Ventilation in the room where the wine cellar is installed is inadequate (this problem usually arises when the outside temperature is high)**: If possible, open the door or windows. Install a ventilation system in the room (ventilation grill, extractor fan, etc…)
- **Thermostat setting decreased too suddenly**: Causes the air conditioning unit to ice up.
- **Air conditioning unit iced up**: Turn the air conditioning unit off for 48 hours and turn on again, ensuring that the thermostat is set on 13 °C or 14°C. If the problem persists, disconnect the mains supply, remove the air conditioning unit from the wall (page 9) and clean the condenser using a vacuum cleaner. This maintenance is not covered by the guarantee.

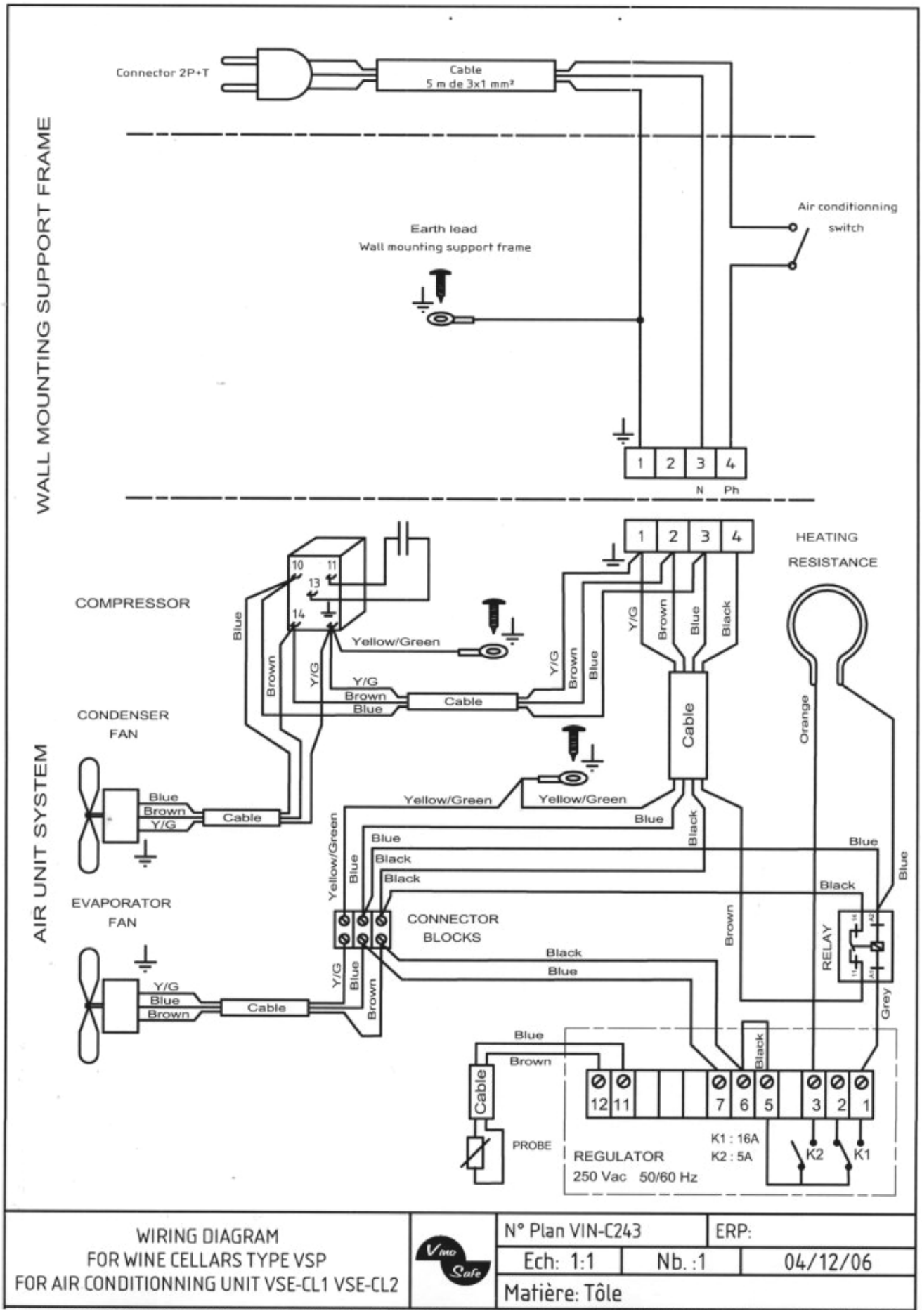


Side to be cleaned

K. QUESTIONS / ANSWERS

This section is developed step by step following new cases that are brought forward to us. You will always find the latest version on our website www.vinosafe.com.

L. DRAFTS


WALL MOUNTING SUPPORT FRAME
Connector 2P+T
Cable
5 m de 3x1 mm²
Earth lead
Wall mounting support frame
Air conditionning
switch
1 2 3 4
N Ph
AIR UNIT SYSTEM
COMPRESSOR
CONDENSER
FAN
EVAPORATOR
FAN
HEATING
RESISTANCE
Orange
Cable
Yellow/Green
Blue
Brown
Black
Y/G
Grey
CONNECTOR
BLOCKS
RELAY
PROBE
REGULATOR
250 Vac 50/60 Hz
K1 : 16A
K2 : 5A
K1
K2
12 11 7 6 5 3 2 1
WIRING DIAGRAM
FOR WINE CELLARS TYPE VSP
FOR AIR CONDITIONNING UNIT VSE-CL1 VSE-CL2
N° Plan VIN-C243
ERP:
Ech: 1:1
Nb. :1
04/12/06
Matière: Tôle

M. WARRANTY

Your VinoSafe cabinet carries a 3 year warranty from the delivery date. Your invoice is also your warranty certificate. Please give all the relevant details if you intend to introduce a warranty claim.

The non-respect of the recommendations appearing in the chapter H1 – Preparation of the "Wine cellar" can generate a faulty operation of the air-conditioning unit, in which case the guarantee could not be applied any more.

N. EXTRACTS FROM THE GENERAL CONDITIONS OF SALE NVS

9. – EXTENDED GUARANTEE
The products are guaranteed against all faults in materials or manufacture for one year from the date of delivery. Work carried out under the guarantee shall not extend the guarantee period. The invoice must be presented when a claim is made under the guarantee. The only obligation incumbent upon NVS under this guarantee shall be to replace free of charge or repair the product or the part which the services agree is defective (except for transportation fees).

10. – GUARANTEE - EXCLUSION
The guarantee does not apply to faults or damage due to natural wear and tear or resulting from an accident (wrongful assembly, faulty maintenance, abnormal use, etc) or from a modification made to the product not intended nor specified by NVS. The products must be set on a perfectly flat and horizontal surface and thus NVS declines all responsibility in case the installation does not conform with this obligation.
The guarantee does not cover apparent faults, which should be notified by the purchaser under the conditions set out in article 5.

Advice on translation:
These sales conditions have been translated to assist non French speaking customers and readers. As the sales contracts are covered by French law, the French version remains the only valid legal text in case of claims.

O. RECOMMENDATIONS TO POTENTIAL BUYERS

If you are satisfied with VinoSafe, we suggest that you refer some potential buyers to us. If you transmit 5 comprehensive addressees of potential buyers to VinoSafe or its reseller, we shall send a gift to you (wine accessory). If some addresses end us as orders, we shall send yet another gift, but more substantial.

You can send the joined document to your reseller by post or by fax, or mail these addresses either to your reseller or direct to VinoSafe at info@vinosafe.com.

P. ADVICES AND CONCLUSION

These guide's detailed information is subject to changes without notice.

NVS SAS - VinoSafe offers no warranty on this equipment if it is used for a different purpose than wine storage. **VinoSafe** cannot be held responsible for potential mistakes in this guide or for any damage linked or generated by the supply, the utilisation or the performances of this equipment.

This guide contains original information protected by copyright. All rights are reserved. Photocopying, copying or translating this document is strictly forbidden apart from a written consent of **NVS SAS - VinoSafe**.

We thanks you again for your trust in **NVS SAS - VinoSafe** and remain, via our resellers or directly, at your entire disposal. And happy wine tasting… with restraint!

DÉCLARATION DE CONFORMITÉ DU CONSTRUCTEUR selon les directives 73/23/CEE 89/336/CEE

CE CONFORMITY DECLARATION according directives EEC/73/23 EEC/89/336

HERSTELLERKONFORMITÄT ERKLÄRUNG entsprechend-Richtlinien EWG/73/23 EWG/89/336

Nous,
We,
Wir,

NVS S.A.S
2 rue des Artisans
F – 68280 SUNDHOFFEN

Déclarons par la présente que la machine
Hereby declare that the machine
Erklären, dass die folgende Maschine

Type / type / Typ_____

Série n° _____

Année de fabrication / Year of production / Herstellungsjahr_____

Est conforme aux dispositions de la directive « Basse tension » 73/23/CEE et de la directive compatibilité électromagnétique 89/336/CEE

Complies with the provisions of the low voltage directive EEC/73/23 and with the provisions of the electromagnetic compatibility directive EEC/89/336

Den Bestimmungen der Niederspannungsenergie EWG/73/23 und den Bestimmungen der elektromagnetischen Übereinstimmung – Richtlinie EWG/89/336 entspricht

Et est également conforme aux dispositions des normes européennes harmonisées suivantes :

Is in compliance with the following harmonised standards :

Und ebenfalls der folgenden Europäischen Normen… entspricht :

EN 60 335-1 sécurité des appareils électrodomestiques et analogues

Safety of household and similar electrical appliances

elektrische Geräte für den Hausgebrauch und ähnliche Zwecke

Timbre de l'Entreprise

(Receipt to join at the order)

I, the undersigned, Mr

_____

Residing at

_____

_____

_____

Declare that I have received the installation and recommandations guide for the VINOSAFE air-conditioning unit VSE-CL1 or VSE-CL2.

Signed at _____ on _____

CUSTOMER'S SIGNATURE